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ABSTRACT

One of a series of instructional booklets designed to introduce adult education program planners to the basic concepts integral to and alternative strategies for conducting needs assessments, this instructional booklet deals with determining how to interpret information. Described first is the relationship of the process of determining how to interpret information to the entire needs assessment process. Following an introduction to the concept of force, procedures are set forth for identifying positive and negative forces that bear significant strength in impacting needs. Also provided are suggestions for determining sources of force information, determining strategies for gathering force information, and determining methods for summarizing force information. (MN)

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AN INTRODUCTION TO NEEDS ASSESSMENT

Special Community Service
and Continuing Education
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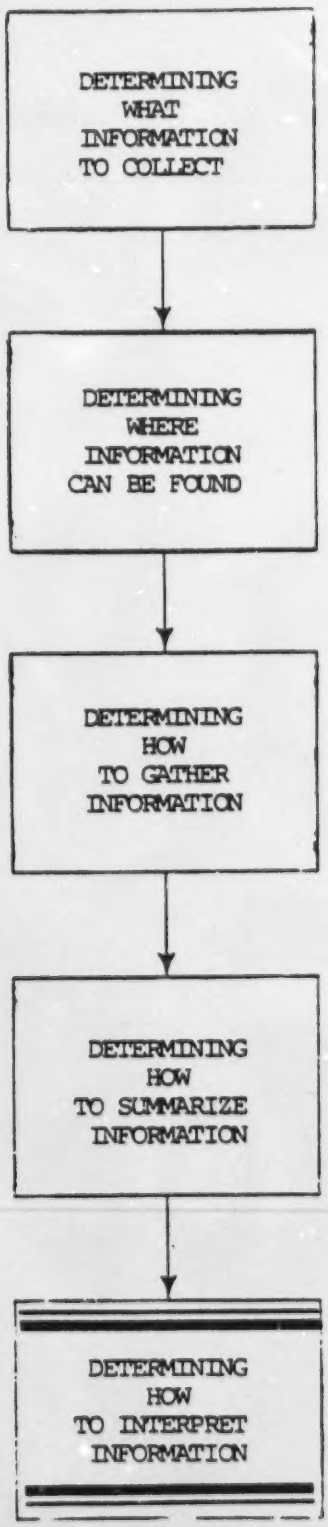
Final Report.


DETERMINING WHAT INFORMATION TO COLLECT
DETERMINING WHERE INFORMATION CAN BE FOUND
DETERMINING HOW TO GATHER INFORMATION
DETERMINING HOW TO SUMMARIZE INFORMATION
DETERMINING HOW TO INTERPRET INFORMATION

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DETERMINING

HOW

TO INTERPRET INFORMATION

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SERIES PREFACE

This instructional booklet is one of a series prepared by the Special Community Service and Continuing Education staff at Texas A&M University. Its purpose is to introduce a diverse body of adult education program planners to basic concepts integral to and alternative strategies appropriate for conducting needs assessments. A broad base of research and information relevant to practice has been tapped in the development of the series.

This series is not in its final form but is rather "in development" as prepared for one-on-one testing in conjunction with a collection of adult education practitioners. Refinements are to be made subsequent to one-on-one, small group and field testing.

Recognition is given to those agencies and individuals who have contributed to the development of this series:

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Participants in the pilot test activities for generating case study applications: Mr. David R. Chagoya, Mr. Robert Felder, Ms. Alice Franzke, Mr. Jon Johnson, Sr. Maria J. Leavy, Mr. Jose D. Leza, Lt. Col. James V. Mahoney, Jr., Mr. G. M. Milburn, Jr., Capt. William J. Schrank, Ms. Lois Soefje and Mr. Charles Weichert.

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TABLE OF CONTENTS

SERIES PREFACE ii

. . . . . .

INTRODUCTION 1

Analogy
Purpose
Linkage
Rationale

DETERMINING FORCES IMPACTING NEEDS 4

Concept
Process

DETERMINING SOURCES OF FORCE INFORMATION 8

DETERMINING STRATEGIES FOR GATHERING FORCE INFORMATION 10

DETERMINING METHODS FOR SUMMARIZING FORCE INFORMATION 11

SUMMARY 12

BOOKLET FIVE

DETERMINING HOW TO INTERPRET INFORMATION

Introduction

Analogy

This booklet is very much like getting at the root of a problem. Let us suppose that the problem is about fleas and ticks, and that adorable pet of yours whom you are about to christen either "Mobile Flea Market #1" or the "Tick and Flea Capital of North Gulch".

Those who have lived through such infestations would certainly not hesitate to say, "We have a problem". Something must be done. However, just knowing that you have a problem--one dog with ticks and fleas--is not the end of your quest. If you have any plans to do something about the situation--and all of sane mind would--you will want to know why, all of a sudden, you are overrun with the varmints because, obviously, a number of alternatives lie before you in terms of removing the problem. These alternatives may range from doing the poor dog in, to sending him on an extended visit to the in-laws, to mowing the lawn, to spraying the carpets and drapes, to heaven knows what. You see, in fact a lot of dogs have ticks and fleas, a lot of people are faced with the problem; and before energy, time and money is invested in changing the situation, it only makes sense to see really what is causing the problem. Maybe your pet has been dipped monthly and never was infested before. Maybe your children brought in a mutt from the neighborhood

and that is what precipitated the onslaught. Perhaps, it is just that you have moved into a home in which an infested pet had lived with the previous owners and the period of dormancy passed, they are raring to go and your pet is just what they are looking for. Perhaps, it has saved the day that you have just engaged Orkin for quarterly extermination services and that has provided some protection. Perhaps your youngster is a hiking enthusiast and has gotten the spring hiking bug again, along with a few other bugs—namely ticks and fleas. If this is the case, then you may simply wish to turn your garage into a debriefing center.

In effect, prior to any of your decisions to act upon a problem situation, you either intuitively or very explicitly detail what is causing the situation to exist. Only then can you be armed with what you could call a reasonable interpretation of the meaning of the situation, with an awareness of what is at work. Then, and only then, are you prepared to select from among the causes of the problem and eliminate the causes one by one. Or, as in the case of having recently engaged Orkin, capitalize on that effect and have them come for an additional interim visit. Action that attempts to get at the causes is generally the only realistic approach to changing a situation with which you are faced. A frontal attack on the ticks and fleas though laudable may help win the battle but it will never conquer the war.

In this booklet we will be helping you to determine in the most accurate way, why the needs which have been identified so far in the needs assessment process exist. Armed with this information, you will be fully prepared for action; namely, to build programs which will

eliminate needs by attacking the problem at its roots.

Purpose

This booklet is written to serve multiple purposes. First, we will help you to determine forces impacting the need which you have identified. Secondly, in a manner very similar to what we have presented to you in booklets two, three and four, we will lead you to determine the sources of force data, the appropriate strategies for gathering this force information and the proper methods for summarizing your force information.

Linkage

Previously, in booklets one through four, we have offered assistance in your determination of the types of need information you should collect, where you should go to obtain this information, how you should proceed to gather your need information, and finally, how you should organize the collected need information.

In this booklet we will assist you in your identification of the forces that cause the needs to exist, determining where you should go to obtain this information; how you should proceed in gathering your force information; and lastly, we will advise you of the methods you might use to summarize your collected force information.

It is our belief that provided with sufficient information on the existing needs as well as the forces impacting such needs, you will be in an ideal position to bring closure to your needs assessment undertaking and to begin some program planning to remediate the needs. You will have identified and diagnosed needs.

Rationale

At this stage, we can assume that some needs have been identified. In other words, you have found out that there exist some discrepancies between the present order of things and the achievement of desired goals. However, to adequately understand any given need, you must work to identify those factors, or forces, that influence the needs. It is only with an understanding of the forces impacting needs that we can know what should be done to reduce or eliminate the need.

Next, as in the identification of need data, it is important that you verify the presence, direction, and magnitude of those forces with information from relevant sources. You need to determine whether authorities, representative segments of your target population and some relevant printed information can best provide you with valid information on forces.

Then, it is up to you to decide on appropriate strategies for gathering valid and reliable information on the forces impacting needs. These gathering strategies from either the key informants or printed information must be feasible strategies for you.

Finally, what remains in this booklet is the organization of the force information collected. You should summarize your force information by filtering out irrelevant data, condensing like data and clustering the composite data base in a format most appropriate for your institutional use.

Determining Forces Impacting Needs

Concept

The main focus in this section is the introduction of the concept of force. We will also orient you to the process of identifying

positive and negative forces that bear significant strength in impacting needs.

Force is defined as any physical, social or psychological entity which contributes either to the deterioration or to the improvement of a given situation or social phenomenon--in this instance--a need. Forces are, when taken in their entirety, those factors responsible for a given condition or need. They affect, either positively or negatively, a given phenomenon with varying degrees of intensity. It is commonly assumed that conditions exist because no one has tried to make the conditions any different. However, when a condition is examined more closely, it becomes clear that there are a large number and variety of forces at work which, together, prevent substantial changes of any kind from occurring. For example, as Director of the Bexar County Women's Center, you are concerned at the low level of employment of female heads of households in the county, a 78% unemployment rate. If you are ultimately to change this situation of need, you must identify probable forces at work, determine reliable sources to inform you about the forces at work, determine how best to approach the sources, and finally organize the information you have obtained. It is possible that positive and negative forces such as the following are at work here: personal or public transportation, marketable skills, policies on the employment of women, current job market conditions, family role beliefs and values, family economic status, self concept, previous job history, basic literacy level and ethnic or racial status.

Process

Adult education program planners are faced with the task of

identifying those forces which are impacting the needs. Therefore, we suggest that you follow a three step procedure for getting this job done.

First, for each identified need, make a comprehensive listing of forces which are judged likely to be impacting it. The forces may be positive forces; namely, those that contribute to the improvement of the given phenomenon; those that function as the "good guys"; those which work toward the remediation of the identified need. The forces may also be negative forces; namely, those that impede the improvement of the given phenomenon; those that function as the "bad guys"; those which work toward the flourishing of the identified need. In developing the list, you may want to start with brainstorming some positive or negative forces that are intrinsic to the persons who own the need. They may be related to the individuals' attitudes and values, their behaviors or actions; or to their possession of specific knowledge or skills. Additionally, you may then wish to move on to those other extrinsic factors that may account for the need state. Some of these relate to personal resources, others to the physical environment, social environment, community institutions, whether public or private and the domain of social norms and prevailing values. These intrinsic and extrinsic forces would provide valuable clues in explaining given need states.

To better illustrate the situation, let us give you one example. Let us say that you are the Civilian Personnel Officer of Jefferson Air Force Base and you are presented with an identified need for developing a management intern training program for the civilian employees.

You may find that some of the positive forces impacting the need are: the management's desire to retain highly qualified currently employed personnel, the projected high retirement rate in middle and top level management positions, the legal support for upward mobility programs of this type from the Equal Employment Opportunity Program, the Federal Women's Program, support from the Government Employees Labor Union; and good feedback from previous programs of a similar nature nationwide in the other branches of the military. At the same time, you may be able to identify some negative forces impacting the need, such as: the unstable employment practices due to frequent agency manpower reductions, the application of veterans' preference hiring practices which tend to exclude a large percentage of the population from employment opportunity; the quota setting by such programs as Equal Employment Opportunity, Federal Women's Programs and Labor Unions which tend either to obstruct or retard the employee selection process; some locally established personnel criteria which tend to restrict movement between career fields; and the increased difficulty in adequately projecting retirement rates under the impact of an accelerating economy.

Our second step is ready to be undertaken. Once you have prepared a comprehensive list of possible forces impacting need, you will want to assess the relative strength or magnitude of each force, positive or negative, in causing the need situation. In the above example, you would probably find that management's desire to attract and retain highly qualified civilian personnel and the anticipated high retirement rate are very strong positive forces, while good feedback from previous programs is a moderately strong positive force. You might also

think frequent manpower reduction is a strong negative force upon the identified need.

Third, you have to decide what forces should be included at this time for verification by appropriate sources. Would you like to include only those moderately to very strong negative forces and only the moderate to very strong positive forces, or would you rather specify the inclusion of all forces except those negative ones that are too weak to have import on the need state. It is important to note here that forces of moderate to great strength which can be verified as impacting needs can later be advantageously manipulated in the remediation of needs. One could accentuate, enlist or capitalize on the positive forces; while at the same time, one could inactivate, reduce, or eliminate the negative forces at work.

Thus, the Principle for Practice is that needs assessors should identify a broad array of positive and negative forces of significant strength in impacting needs.

Determining Sources of Force Information

In this section, we are not going to introduce you to any new concepts on sources. No new definitions are necessary. Rather, we are going to review with you the three main sources of information as we have presented them in Booklet Two, Determining Where Information Can Be Found, and also review with you some basic criteria that you may use in the final selection of sources.

A source is an individual, group of individuals, or a piece of written information that can provide you with valid and reliable data relative to the forces impacting the need. The sources we suggest here

for soliciting force information are similar to the sources that you can approach in getting your need information. They are the authorities, your target population, and some relevant printed information.

First, we propose, as before, that you brainstorm a list of institutions and independent individuals who have special knowledge and experience about the forces to be explored in the study. Then, choose a workable number of these institutions or independent individual authorities that you would actually approach because they contribute significantly or uniquely to the realization of the goals identified in your study and therefore should be knowledgeable about forces at work.

Secondly, we suggest that you identify a representative sample of your target population to allow for their input into the identification of those forces impacting the needs attributed to them. You may also want to have them classified in terms of important population characteristics so that you know who in your target group has identified the forces impacting the need.

Finally, we recommend that you locate some possible documents or printed information that may give you data relating to the forces causing need. Here, again, we advise you to assess the printed information according to its geographical, legal, political, ethical and temporal accessibility. You will want to tap only those documents that are accessible to your study.

Thus, the Principle for Practice is that needs assessors should identify appropriate sources to obtain information on what forces are at work for any given need.

Determining Strategies for Gathering Force Information

In the following paragraphs, as in the previous ones, we will not introduce any new concepts or new steps for you to undertake. We would like only to refresh your memory on the definitions of and procedures for collection and retrieval strategies. This time, they are identified as strategies for gathering force information.

As mentioned before, collection strategies are defined as methods for collecting or obtaining force data from either the authorities or the target population. After developing a list of collection strategies for force data, it is of critical importance that you select from them for each source only those that are feasible to carry out and also that can provide you with valid and reliable data. Take into consideration the requisites for implementing each strategy; assess each one of them according to the human skills, personnel, time, financial resources and physical resources required for implementation.

Retrieval strategies are ways of extracting relevant force data from available printed information. The written materials should be compared to the purpose, definitions of goal concept, geographical coverage, population, time frame, and methodology of your needs assessment and judged for relevance to your study. The closer the sources correspond to the six criteria, the more likely you can make use of these readily available materials. However, it should not come as a surprise that you may need to make certain adjustments in some parts because of differences identified.

Thus, the Principle for Practice is that needs assessors should identify appropriate strategies for gathering information on the forces

impacting needs.

Determining Methods for Summarizing Force Information

In our last booklet, Determining How to Summarize Information, we asked you to reflect upon the three methods we proposed for organizing your need information. They are filtration, condensation and clustering. The same three processes or approaches can be repeated to summarize your force information. Here again, we will be reviewing concepts and processes rather than introducing new ones.

Filtration is the process of selectively screening out certain force data on the basis of clearly identified criteria. We suggest that you screen your force data by deleting those that show an absence of impact on the identified need and those forces that are very weak, or almost imperceptible. You should also filter out data that indicate a probable or evolutionary dissolution of the force in the near future and those data relating to a force which bears little or no instrumental relationship to other forces and which could ultimately be altered indirectly through plans of action directed toward other forces.

Condensation of force data is the process of translating force data from one form to another to reduce information overload. It also works to facilitate the analysis, storage and reporting of raw data. We propose that you condense your force data first according to major types of forces such as economic or social forces.

Clustering is the process of grouping the composite data base judged of significant magnitude, immediacy, instrumental value and alterability; and subsequently condensed in various ways from the raw

data form. The composite force data can be clustered in terms of goals, in terms of subgroups of the target population and in terms of the forces. Such an organization of force data will give you and your institution a comprehensive view of the diversified forces impacting needs. It provides a blueprint for the development of congruent, collaborative, integrated and selective programming to remediate the identified needs.

Thus, the Principle for Practice is that needs assessors should identify appropriate methods for summarizing force information.

Summary

We have presented in booklets one through four the four major issues related to the collection of need information--determining what information to collect, where information can be found, how to gather information and how to summarize information. In this booklet, we have tried to help you to interpret the need information collected by identifying positive or negative forces impacting the needs.

We have also led you through the same processes for determining what force information to collect, where that information is to be found, how that information is to be obtained and how that information is to be summarized.

Forces are any physical, social or psychological entities which contribute either to the deterioration or to the improvement of a given situation or social phenomenon--in this instance--a need. They affect an identified need either positively or negatively with varying degrees of intensity. It is important for needs assessors to identify a broad array of positive and negative forces of significant strength that impact upon needs.

The three major sources of force information are identical to the sources of need information. They are the authorities, the target population and the available printed information. To seek valid and reliable force information, we must strive to solicit input from authorities that contribute significantly or uniquely to the realization of goals, a representative sample of the actual owners of needs, and printed information that is judged geographically, legally, politically, ethically and temporally accessible.

Appropriate strategies for gathering force information refer to both good collection strategies for getting force data from your key informants and proper retrieval strategies to extract force data from available printed information. Collection strategies are to be assessed in terms of their feasibility and capability of yielding reliable and valid data. At the same time, appropriate retrieval strategies would lead you to available printed information which is either identical to or compatible with the purpose, definitions of goals, geographical area, population, time frame and methodology of your needs assessment.

Once force information is collected, we suggest that you undergo the same processes of summarization as you did for your needs information. We propose that you filter out force data that have little or no impact on the identified needs; delete those forces that might eventually be dissolved and ultimately be altered through action directed toward other instrumental forces; and condense your screened data, either according to some force types, or according to the relationship between the forces and the needs. Finally, to better facilitate the presentation of force data, it is recommended that you

cluster the composite data in terms of goals, subgroups of your target population, and the forces you identify as significant in impacting the need.

In this booklet, you have been provided with a process for determining forces that impinge upon real needs. This booklet constitutes the last portion of our needs assessment process.

It is anticipated that through a review of some of the central considerations of the needs assessment process, you have been sufficiently prepared to begin to build programs to remediate the needs which you have both identified and diagnosed. It is anticipated that you have been fortified with a solid foundation from which program designs can flow. It is acknowledged that, although such a base is no guarantee of future quality programming, it is the most defensible posture from which to engage in building educational and service programs for adults. It sets the stage for your significant contribution to the improvement of the quality of life for our adult population.

Lastly, it is recommended that you briefly review the booklet, An Introduction to Needs Assessment for a capsule of the entire need assessment process and its centrality to the more comprehensive role of a program planner in the arena of adult education.